1. Record Nr. UNINA9910632488003321 Autore Wang Jingxin Titolo Forest and Biomass Harvest and Logistics / / by Jingxin Wang Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2022 **ISBN** 9783031129469 9783031129452 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (383 pages) Collana Earth and Environmental Science Series Disciplina 910.5 634.98 Soggetti Renewable energy sources Forests and forestry Agriculture - Economic aspects Power resources Science - Social aspects Renewable Energy Forestry Agricultural Economics Natural Resource and Energy Economics Science and Technology Studies Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references. Nota di bibliografia Nota di contenuto Introduction and Terminology -- Forest and Biomass Harvesting Business -- Felling -- In-Woods Processing -- Ground-Based Extraction -- Loading and Transportation -- Cable and Aerial Harvesting Systems -- Chipping and Thinning Systems -- Biomass Harvesting -- Interactions of Stands, Harvest, and Machines --Production Analysis -- Cost Analysis -- Harvesting System Analysis --Forest and Biomass Supply Chain Analysis -- Managing Soil and Water Impacts -- Best Management Practices -- Harvest Planning -- Harvest Scheduling and Carbon Sequestration.

This book explains forest and woody biomass harvest, harvesting machines, systems, logistics, supply chain management, best

Sommario/riassunto

management practices, harvest scheduling and carbon sequestration. It also covers applications of harvesting principles in forest and biomass management practices. The book provides an in-depth understanding of functions and applications of current and future harvesting technologies, the unique characteristics of harvesting machine with respect to cost, productivity, and environmental impacts. Special features include harvest machine illustrations and images of field operations, tabular presentations of filed studies of forest operations and detailed modelling processes for forest and biomass harvest logistics and supply chain management. Specifically, the book is designed for students, researchers, educators, and practitioners in the field of forest and biomass harvest and logistics. The book's contents have been tested in teaching as the Harvesting Forest Product class for undergraduates and graduates in the Division of Forestry and Natural Resources at West Virginia University since 2000. The information contained in this book is a robust reference resource for students who would be future forest and biomass managers, timber contractors, entrepreneurs, researchers, and educators in the fields of forest and biomass operations, engineering, and resource management.